



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Fish Habitat Management
Suite 101, 5204-50th Avenue
Yellowknife, Northwest Territories
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Gestion de l'Habitat du Poisson
Suite 101 5204, 50^e Avenue
Yellowknife (Territoires du Nord-Ouest)
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Your file / *Votre référence*
EA0405-002

Our file / *Notre référence*
SC04006

October 21, 2005

David Harpley, Environmental Coordinator
Canadian Zinc Corporation
Suite 1710-650 West Georgia Street
Vancouver, BC V6B 4N9

Dear Mr. Harpley:

RE: Prairie Creek Crossing – Canadian Zinc Corporation Phase III Drilling Program (EA0405-002)

The Department of Fisheries and Oceans, Fish Habitat Management – Western Arctic Area (DFO) has reviewed your request of October 12, 2005, for advice regarding timing of Prairie Creek crossing pursuant to the habitat protection provisions of the *Fisheries Act*.

It is my understanding that the Canadian Zinc Corporation (CZN) would like to cross water bodies with heavy equipment after the fall fish spawning period has begun (August 30th) in order to store equipment at the camp for the winter. This would involve 2 crossings with a bulldozer towing a drill rig, and 1 crossing with the bulldozer only. Daily access of smaller pickup trucks for crews and fuel would be required as well.

Since the crossing locations are composed of coarse gravel / cobble substrates, fording activities will likely not result in the generation of sediment which would affect young-of-the-year fish. However, bull trout and mountain whitefish spawn in the fall, typically after August 30. Since these fall-spawning species deposit their eggs in gravels / cobbles, it is our opinion that micro-habitats exist at the crossing locations which are likely suitable for spawning activities. Since eggs in these gravels / cobbles incubate over the winter and hatch the following spring, there is the potential for crossing activities after August 30 to destroy incubating eggs at the crossing locations. Given the above, and without detailed studies that show that all ford locations are definitely not used for spawning, DFO is of the opinion that restricting the crossings to the time of June 15th to August 30th will protect the sensitive spawning / egg incubation period of fish in Prairie Creek and its tributaries.

Section 32 of the *Fisheries Act* prohibits the destruction of fish, including their eggs, by means other than fishing without an authorization from the Minister of Fisheries. If crossing Prairie Creek after August 30 is required, DFO recommends that CNZ submit an application for a section 32 authorization. If an authorization is issued, CNZ would be required to implement all reasonable mitigation

measures to minimize the potential impacts to fish. This may include, but not be limited to, not crossing water bodies during actual fish spawning activities. This would therefore require development and implementation of a program that would monitor these spawning activities. **Please note**, a Section 32 *Fisheries Act* authorization would only be granted if DFO finds that the adverse impacts to fish are judged to be not significant.

Please note this letter does not constitute authorization of these undertakings pursuant to the *Fisheries Act*. It is the proponent's responsibility to obtain any approvals that may be required under any other legislation.

Please contact me at (867) 669-4927 if you have any questions or wish to discuss any of the foregoing in more detail.

Sincerely,



Ernest Watson
Area Habitat Biologist
Fish Habitat Management
Department of Fisheries and Oceans - Western Arctic Area

cc D. Majewski, DFO-FHM
L. Dow, DFO-C&P
M. Haelele, MVEIRB
M. Fournier, EC
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